CLAIMS

A data compression method, comprising:

 analyzing data based on a plurality of algorithms to determine a compression ratio
 for each algorithm; and
 compressing the data based on the algorithm that produces the best compression

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- compressing the data based on the algorithm that produces the best compression ratio.
- The data compression method according to claim 1, wherein the compressed data
 includes at least one index file that references the algorithm that produces the best compression ratio.
 - 3. The data compression method according to claim 2, further comprising decompressing the compressed data based on a last index file that is attached to the data.
 - 4. The data compression method according to claim 1, wherein said algorithms remove and index repeating bit patterns.
- 5. The data compression method according to claim 2, wherein the compression generates an encrypted data stream output.
 - 6. The data compression method according to claim 1, wherein the compression is initiated manually or automatically based on a command from a user interface.
- 7. The data compression method according to claim 6, wherein a portion of the compressed data is decompressed based on said command.
 - 8. The data compression method according to claim 6, further comprising introducing additional data, wherein the additional data is compressed and associated with the compressed data automatically.

- 9. The data compression method according to claim 6, further comprising compressing and associating a descriptive tag to said data based on the user interface.
- 10. A method of compressing data for transmission, comprising:

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analyzing data based on a plurality of algorithms to determine a compression ratio for each algorithm;

compressing the data a first time based on the algorithm that produces the best compression ratio;

analyzing the compressed data based on the plurality of algorithms to determine a compression ratio for each algorithm; and

compressing the data iteratively based on the algorithm that produces the best compression ratio.

- 11. The method according to claim 10, wherein said algorithms remove repeating bit patterns.
 - 12. The method according to claim 10, wherein said compressing the data the first time comprises attaching a first index file to the data.
- 20 13. The method according to claim 12, wherein said compressing the data iteratively comprises attaching an index file to the data for each iteration.
 - 14. The method according to claim 13, wherein the index file references the algorithm that produces data with the least number of bits.
 - 15. The method according to claim 14, wherein the compressed data is decompressed based on a last index file that is attached to the data.
- 16. The data compression method according to claim 10, wherein a portion of the compressed data is decompressed based on a command from a user interface.

- 17. The data compression method according to claim 10, further comprising selecting additional data, wherein the additional data is compressed and associated with the compressed data automatically.
- 5 18. The data compression method according to claim 16, further comprising compressing and associating a descriptive tag to said data based on a command from the user interface.
 - 19. A method for transferring a digital identification mark with compressed data over a data transmission medium, comprising:
 - compressing data based on a plurality of algorithms to determine a data compression ratio associated with each algorithm;

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iterative compression of the data based upon using the algorithm that produces the best data compression ratio;

generating a compressed digital identification mark having a unique authentication code; data compression of said digital identification mark with a second set of compressed data to produce a single mass of compressed data; and

transmitting said single mass of compressed data over a data transmission medium.

- 20. The method according to claim 19, wherein said algorithms remove repeating bit20 patterns.
 - 21. The method according to claim 19, wherein the compression is initiated manually or automatically based on a command from a user interface.
- 25 22. The method according to claim 19, wherein the digital identification mark comprises a graphic image.
 - 23. The method according to claim 19, wherein the digital identification mark comprises text.
- 30 24. The method according to claim 19, wherein the digital identification mark comprises audio data.

25. The method according to claim 19, wherein the unique authentication code comprises at
east one of time, owner profile, and identity of a recipient.
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